

## ISUZU MOTORS LIMITED

EXECUTIVE ORDER U-R-006-0166 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2004	4SZXL02.2DNB	2.2	Diesel	5000
SPECIAL I	EATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT A	PPLICATION
	Direct Diesel Injec	etion	Generator S	et

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION STANDARD			ı	XHAUST (g/kW-l	1r)		OI	PACITY (%	<b>(6)</b>
CLASS	CATEGORY		HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	N/A	N/A	N/A
		CERT	-		7.0	2.4	0.31			1973

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this \_\_\_\_\_\_ day of December 2003.

Allen Lyons, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

Isuzu Motors Limited Manufacturer:

Engine category: Nonroad Cl EPA Engine Famiy: 4SZXL02.2DNB Engine category:

Mfr Family Name: NA

**New Submission** Process Code:

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3.BHP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM mm/stroke@peak 8.Fuel Rate: ngine Model Åህ (SAE Gross) (for diesel only) (for diesels only) (SEA Gross) torque (lbs/hr)@peak torque D	EM,DFI	NA	NA	NA	13.8@1800 NA NA	34.4@1800	4LE2NABDC-01 AA-4LE2 ·2δ. β 35.9@1800	AA-4LE2 '3	4LE2NABDC-01
	9.Emission Contro Device Per SAE J19	8.Fuel Rate: (lbs/hr)@peak torque	7.Fuel Rate: mm/stroke@peak torque	6.Torque @ RPM (SEA Gross)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	4.Fuel Kate: mm/stroke @ peak HP (for diesel only)	3.BHP@RPM J∫W (SAE Gross)	2.Engine Mode	ode